A Modular Access Database For Psychiatry

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Designing a modular database that allows psychiatry residents to add or subtract modules depending on the clinical needs and type of service through which they are rotating seems to be a way to make collecting clinical information more specific and faster. Reporting features can be patient specific or more global in style and could also serve as a training log of clinical experiences.

INTRODUCTION

One of things that seems to be missing in the fields of medicine and psychiatry is a simple clinical database that is functional, simple to use and expandable or contractible depending on your clinical service needs. The goal was to construct a database for use in psychiatric residency training that could adapt to the various services through which residents rotate.

After working with psychiatric residents and faculty and teaching the use of databases to manage patient data, the author devised a database written in Foxpro™ that starts with a simple basic data set. As the clinical needs change or become more complicated, another module can be chosen to assist the clinician in dealing with the changing aspects of the clinical information.

Asking different faculty what they want in an optimal database results in many different versions of the ideal way of collecting patient data. Often the type of database they envision would depend on the type of clinical work they do. The same is true of residents. They want different information collected when they are rotating through an outpatient service then when they work on an inpatient service or a psychiatric emergency room. Since residency training has well defined clinical rotations during the years of training, it seemed the best place to construct a modular data collection system that could adapt to the changing clinical services.

DISCUSSION

The type of data that needs to be collected during residency training begins with a stable core of the usual identifiers and demographic data, but as a resident rotates through different types of training experiences, additional data needs to be collected. This additional data varies depending on the type of service the resident works on. Rather than construct a "database for all purposes" where residents would be asked to ignore the fields of data that don't apply to them, the Modular Access Database would offer relevant data collection or reporting specific to the type of service.

As the resident rotates through the Psychiatric Emergency Room, a special ER module can be activated which contains fields that are more visit dependent and more acute in their reporting capabilities. The same is true if he/she moves on to a consultation - liaison service. Just as the type of clinical encounter is different, the type of consultation on patients seen in this service are of a different character as well. The module for collecting that data needs to be structured differently to accommodate the consultation.

The database is essentially clinically focused. Each encounter or visit adds a record to the database and a running log of patient contacts can be maintained. In Psychiatric Residency Training, a continuous log of all patient visits needs to be maintained over the course of training for periodic review with the Training Director. This system easily lends itself to also function as a personal patient record system. Print-outs are chosen from a list of common requests and custom reports can be generated with minimal effort.

The idea of modularity in database design seems to be a way of helping clinicians organize data to focus attention on the specialized concerns of a particular type of clinical encounter. It can be extremely helpful in assisting the clinician to define their assessment and maintain record keeping.

References

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